



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,257	05/18/2005	Hiroyuki Okamoto	OKAMOTO13	5975
1444	7590	01/19/2007	EXAMINER	
BROWDY AND NEIMARK, P.L.L.C. 624 NINTH STREET, NW SUITE 300 WASHINGTON, DC 20001-5303			NGUYEN, TRINH T	
			ART UNIT	PAPER NUMBER
			3644	
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	01/19/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/535,257	OKAMOTO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Trinh T. Nguyen	3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on Amend. dated 11/6/06.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 6-19 is/are pending in the application.
- 4a) Of the above claim(s) 6-12, 17 and 18 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 13-16 and 19 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>8/2/06</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Species I (claims 1-3) in the reply filed on 11/6/06 is acknowledged. The traversal is on the ground(s) that Species I and II are not distinct/different. This is not found persuasive because it is noted that Species II (claims 4-5) requires a microorganism carrier in which Species I (claims 1-3) lacks of. Furthermore, it is noted that the new claims 6-12, 17, and 18 have been withdrawn from further consideration as being drawn to a nonelected species because the new claims 6-12, 17, and 18 are directed to a microorganism carrier.

The requirement is still deemed proper and is therefore made FINAL.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 13-16, and 19 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 13-16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP2001-314136 (JP'136).

JP'136 discloses that it is old and well known to provide an aquarium cleaning device comprising a charcoal wherein the charcoal is consisted of burned grain waste.

It is noted that JP'136 does not mention that the grain is spent grain. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used spent grain, since applicant did not provide a reason and/or showing any criticality as to why spent grain has to be used specifically. As shown in lines 7-9 and lines 31-33 of page 2, Applicant indicates that either spent grains, tea grounds, coffee grounds, plum seed, yeast and/or yeast cell wall can be used in the aquarium cleaning device, and it appears that the invention would perform equally well with the grain such as one taught by JP'136.

It is noted that the method/process of forming the product (i.e., the charcoal) is not germane to the issue of patentability of the product itself. The patentability of the product does not depend on its method/process of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. Therefore, the limitations (i.e., "a charcoal obtained by drying and carbonizing...having been subjected to a separate activation" and "in addition to having been dried...subjected to forming") have not been given patentable weight.

For claim 15, it would have been an obvious matter of design choice to one having ordinary skill in the art at the time the invention was made to have modified JP'136's grain charcoal so as to include a grain charcoal of plum seeds, since applicant did not provide a reason and/or showing any criticality as to why the grain charcoal has to be a specific plum seed charcoal (note that in lines 5-10 and lines 31-33 of page 2 of the specification indicates that the charcoal can be either of spent grains, tea grounds,

coffee grounds, plum seeds, yeast, or yeast cell wall) and it appears that the invention would perform equally well with the grain charcoal such as one taught by JP'136.

For claim 19, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified JP'136's charcoal so as to include a charcoal with grain size of 5-10 mm, since it has been held that where routine testing and general experimental conditions are present, discovering the optimum or workable ranges involves only routine skill in the art. Also, since applicant did not provide a reason and/or showing any criticality as to why the grain size has to be at a specific ranges, it is believed that through trial and error during the manufacturing process that one comes up with certain grain size to meet the design criteria of the overall manufacturing process.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3644

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trinh T. Nguyen whose telephone number is (571) 272-6906. The examiner can normally be reached on M-F (9:30 A.M to 6:00 P.M). The examiner's supervisor, Teri Luu can be reached on (571) 272-7045 for the purpose of status inquiry only. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Trinh T Nguyen  
Primary Examiner  
Art Unit 3644

1/16/07